

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/51 (05-03) (AW 09/03)
Approved for use through 01/31/2004. OMB 0651-0033
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

**REISSUE APPLICATION SUBSTITUTE DECLARATION
BY THE INVENTOR**

Docket Number (Optional):
MTS-880US1

I hereby declare that:

Each inventor's residence, mailing address and citizenship are stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is described and claimed in patent number 5,825,421, granted October 20, 1998, and for which a reissue patent is sought on the invention entitled VIDEO CODING METHOD AND DECODING METHOD AND DEVICES THEREOF, the specification of which

- ☐ is attached hereto.
- ☒ was filed on October 18, 2000 as reissue application number 09/691,857 and was amended on _____ (if applicable).

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

- ☒ I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b). Attached is form PTO/SB/02B (or equivalent) listing the foreign applications.

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply.)

- ☐ by reason of a defective specification or drawing.
- ☒ by reason of the patentee claiming more or less than he had the right to claim in the patent.
- ☐ by reason of other errors.

At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, such must be stated with an explanation as to the nature of the broadening.

During the prosecution of the application that issued as the above patent, the inventors did not recognize that the features disclosed in new claims 13-16 were appropriate to claim. As such, the inventors did not claim all that they had a right to claim. More specifically, the inventors did not claim an encoding method for encoding a video image sequence of frames that includes the following steps:

(a) dividing a source sequence into a group of pictures, each group of pictures comprising an I-frame followed by a plurality of P-frames and B-frames; (b) dividing each I-frame, P-frame and B-frame into a plurality of spatially non-overlapping blocks of pixel data; (c) encoding a block in the I-frame independently from any other frames in the group of pictures; (d) predictively encoding a block in a P-frame, based on the I-frame positioned before the P-frame or a previous P-frame positioned before the P-frame; (e) bi-directionally predictively encoding a block in a B-frame, based on the I-frame positioned before the B-frame or the previous P-frame and the P-frame positioned after the B-frame; (f) deriving a scaled forward motion vector and a scaled backward motion vector for the block in the B-frame by scaling a motion vector of the block predictively encoded in the P-frame positioned after the B-frame; (g) obtaining a final forward motion vector for the block in the B-frame by adding a delta motion vector to the scaled forward motion vector; and (h) obtaining a final backward motion vector for the block in the B-frame by adding the delta motion vector to the scaled backward motion vector.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.175. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**REISSUE APPLICATION DECLARATION BY THE INVENTOR
(page 2)**Docket Number (Optional):
MTS-880US1

All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant.

Note: To appoint a power of attorney, use form PTO/SB/81.

Correspondence Address: Direct all communications about the application to:

☒ Customer Number:

23122

OR

☒ Firm or Individual Name:

RatnerPrestia

Address: P.O. Box 980

Address:

City: Valley Forge

State: PA

Zip: 19482

Country: USA

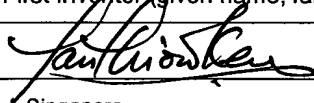
Telephone: (610) 407-0700

Fax: (610) 407-0701

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon, or any patent to which this declaration is directed.

Full Name of Sole or First Inventor (given name, family name): Thiow Keng Tan

Inventor's Signature



Date 04 June 2004

Residence

Singapore

Citizenship Malaysia

Mailing Address Block 553, Choa Chu Kang North 6, #11-08

Full Name Second Joint Inventor (given name, family name):

Inventor's Signature

Date

Residence

Citizenship

Mailing Address

Full Name Third Joint Inventor (given name, family name):

Inventor's Signature

Date

Residence

Citizenship

Mailing Address

☐ Additional inventors are listed on

Supplemental Sheet(s).

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION – Supplemental Priority Data Sheet**Foreign applications:**

| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Copy Attached? | |
|--|---------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| | | | | YES | NO |
| 7-340609 | JAPAN | 12/27/1995 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.